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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,661	03/19/2001	Takeshi Fujii	Q61851	9052

7590 01/03/2007
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
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Washington, DC 20037-3213

EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/810,661

Applicant(s)

FUJII ET AL.

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-25 is/are pending in the application.
- 4a) Of the above claim(s) 9-13, 17 and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 14-16 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 1, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/10/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 9-13, 17, 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/12/2006.

Claim Objections

2. Claims 1, 14, 16 are objected to because of the following informalities: "...when recording pixels in a highlight..." of line 10, claim 1, line 8, claim 14, and line 10, claim 16 appear to be "...when recording pixels are in a highlight area." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3, 15, 18-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of "maximum permissible gradation" is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time

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the application was filed, had possession of the claimed invention. After careful examining applicant's invention, the limitation that has support in the specification is not "maximum permissible gradation value" but "all gradations of the image recorded on the photosensitive medium."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 5,731,884) in view of well-known prior art.

Regarding claims 1, 14, 16: Inoue teaches an apparatus (fig. 1) for recording an image by scanning a photosensitive medium (column 5, lines 44-50) with a light beam generated based on an image signal (image, column 4, lines 30-36), comprising: recording duty ratio detecting means (controller 12 detects the supplied dot area percentage data, column 4, lines 30-40) for detecting a recording duty ratio (dot area percentage, column 2, lines 10-20) of an image (image, column 4, lines 30-36, that is formed by many halftone dots of fig. 7-10) to be recorded on the photosensitive medium based on the image signal; and light beam intensity modulating means (column 5, lines 30-40) for modulating the intensity of the light beam based on the detected recording duty ratio (fig. 5, fig. 6), wherein said photosensitive medium is of such a nature that an

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area irradiated with light remains as an image (column 5, lines 49-50), and said light beam intensity modulating means comprises means for modulating the intensity of the light beam to a higher level when recording pixels in a highlight area (fig. 5, showing all gradation values of 48-58; 25% of such value is about gradation value of 50, e.g., in the area of using B175 screening rule is having a laser power of 24.6) of the image when compare to recording pixels in other areas of the image (e.g., gradation 52 in the area of using B430 screening rule is having a power of less than 24) that is having higher gradation values (52 is greater than 50).

Note: Inoue teaches using different screening rule for printing, Inoue does not teach using different screening rule in printing image on a photosensitive medium.

However, it is well known in the art to print image, using different screening rule on a photosensitive medium to generate better image (official notice).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Inoue to print image, using different screening rule on a photosensitive medium to generate better image.

Regarding claim 5: Inoue teaches wherein the recording duty ration detecting means comprises means (17, fig. 1, that detects S0 form the measuring unit) for detecting a recording duty ratio corresponding to a given area in the image recorded on the photosensitive medium.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 5,731,884) in view of well known prior art as applied to claim 1 above, and further in view of Persoon et al (4,501,016).

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Regarding claim 4: Inoue does not teach wherein the recording duty ratio detecting means comprises a low pass filter.

Persoon, in the same area of detecting gray image data (column 5, lines 60-65), teaches it is well known in the art to use a low pass filter to reduce noise in an image signal (column 6, lines 1-5).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Inoue to include: a low pass filter in the controller of Inoue to reduce image signal noise.

Allowable Subject Matter

8. Claims 6-8 are allowed.

Response to Arguments

9. Applicant's arguments filed 7/10/2006 have been fully considered but they are not persuasive.

With respect to applicant's argument that Inoue does not teach "the intensity of the light beam is varied when recording dots in highlight areas of an image when compared to recording dots in other areas of the image" has been considered.

In reply: Inoue teaches said light beam intensity modulating means comprises means for modulating the intensity of the light beam to a higher level when recording

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pixels in a highlight area (fig. 5, showing all gradation values of 48-58; 25% of such value is about gradation value of 50, e.g., in the area of using B175 screening rule is having a laser power of 24.6) of the image when compare to recording pixels in other areas of the image (e.g., gradation 52 in the area of using B430 screening rule is having a power of less than 24) that is having higher gradation values (52 is greater than 50).

Note: Inoue teaches using different screening rule for printing, Inoue does not teach using different screening rule in printing image on a photosensitive medium.

However, it is well known in the art to print image, using different screening rule on a photosensitive medium to generate better image (official notice).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Inoue to print image, using different screening rule on a photosensitive medium to generate better image.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 23, 2006

A handwritten signature in black ink, appearing to read 'K. Y. Poon', with a stylized flourish at the end.

**KING Y. POON
PRIMARY EXAMINER**